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Home Heaters: A Holistic View of the Financial Statements

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ABSTRACT

- Although both companies follow generally accepted accounting principles (GAAP), **each manager makes different choices and estimates when applying GAAP.**

CASE

- At the beginning of the year 20X1, two companies began operations to **sell home heating units** (*unidades de aquecimento doméstico*). Eads Heater, Inc. is located in Eads, Colorado, and Glenwood Heating, Inc. is in Glenwood Springs, Colorado. The companies operate under **similar economic conditions** and have **identical operations** during the year. However, **each manager makes different accounting choices** and estimates when applying generally accepted accounting principles (GAAP) in preparing the company's financial statements.

PARTE A

PART A

(First-Year Transactions)

Date	Number Of Units	Cost Per Unit
January 10	40	\$1,000
March 14	60	1,100
June 1	20	1,150
September 15	62	1,200
October 30	28	1,300

Both companies have completed identical transactions during **the first year of operations, 20X1...**

- On January 2, each company issued 3,200 shares of capital stock for \$160,000 and commenced operations.
- On January 2, each company borrowed \$400,000 on a 20-year, 7 percent note payable. Interest plus \$20,000 principal is due **September 30** each year, beginning 20X1.
- On January 3, each company purchased land and a building for \$420,000. Both managers assigned \$70,000 to the land and \$350,000 to the building. Each company paid cash for the land and building.
- On January 5, each company purchased delivery equipment at a cost of \$80,000. Both purchases were made with cash.
- Each company **sells** one model of home heating unit, and made the following **credit purchases during the year**. (You may record all the **purchases in one transaction**.)
- Each company **sold 160 units for \$398,500** during the year. All sales were on **credit**; 90 days, same as cash. You will just record the sales piece of this transaction for now. Management has not yet determined how inventory and cost of goods sold will be **valued**. Therefore, this year, management will use the **periodic inventory system** and record cost of goods sold at the end of the year **(in Part B)**.
- \$299,100 was collected during the year on the sales described in Transaction 6 above.
- \$213,360 was paid on the purchases made in Transaction 5 above.
- On September 30, the **first \$20,000 principal payment plus nine months' interest** was made on the note payable described in Transaction 2.
- A total of \$34,200 was paid for a variety of expenses, such as advertising, supplies, insurance, and wages. These expenses are recorded in an account called "other operating expenses."
- Dividends of \$7.25 per share were paid to the stockholders on December 1.
- Management made an adjusting entry to accrue three months' interest on the note payable in Transactions 2 and 9 above.

PART A

(First-Year Transactions)

- **1.** On January 2, each company issued 3,200 shares of capital stock for \$160,000 and commenced operations.

PART A

(First-Year Transactions)

BALANÇO	02-fev-11
	Capital
Caixa	160.000
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	160.000
Fornecedores	
Empréstimo	
Capital	160.000
Lucros acumulados	
PASSIVO TOTAL	160.000

PART A

(First-Year Transactions)

- 2. On January 2, each company borrowed \$400,000 on a 20-year, 7 percent note payable. Interest plus \$20,000 principal is due September 30 each year, beginning 20X1.



Pagamento em 30 de setembro
Quanto vai pagar de juros e
principal?

Juros?

2. On January 2, each company borrowed \$400,000 on a 20-year, 7 percent note payable. Interest plus \$20,000 principal is due September 30 each year, beginning 20X1.

Empréstimo	SI	Juros	Amort+Juros	Interm	Juros	SF
Ano 0	0	0	0			400.000
Ano 1	400.000	21.000	(41.000)	380.000	6.650	386.650
Ano 2	386.650	20.299	(46.949)	360.000	6.300	366.300
Ano 3	366.300	19.231	(45.531)	340.000	5.950	345.950
Ano 4	345.950	18.162	(44.112)	320.000	5.600	325.600
Ano 5	325.600	17.094	(42.694)	300.000	5.250	305.250
Ano 6	305.250	16.026	(41.276)	280.000	4.900	284.900
Ano 7	284.900	14.957	(39.857)	260.000	4.550	264.550
Ano 8	264.550	13.889	(38.439)	240.000	4.200	244.200
Ano 9	244.200	12.821	(37.021)	220.000	3.850	223.850
Ano 10	223.850	11.752	(35.602)	200.000	3.500	203.500
Ano 11	203.500	10.684	(34.184)	180.000	3.150	183.150
Ano 12	183.150	9.615	(32.765)	160.000	2.800	162.800
Ano 13	162.800	8.547	(31.347)	140.000	2.450	142.450
Ano 14	142.450	7.479	(29.929)	120.000	2.100	122.100
Ano 15	122.100	6.410	(28.510)	100.000	1.750	101.750
Ano 16	101.750	5.342	(27.092)	80.000	1.400	81.400
Ano 17	81.400	4.274	(25.674)	60.000	1.050	61.050
Ano 18	61.050	3.205	(24.255)	40.000	700	40.700
Ano 19	40.700	2.137	(22.837)	20.000	350	20.350
Ano 20	20.350	1.068	(21.418)	0	0	0

PART A

(First-Year Transactions)

BALANÇO	02-fev-11
	Empréstimo
Caixa	400.000
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	400.000
Fornecedores	
Empréstimo	400.000
Capital	
Lucros acumulados	
PASSIVO TOTAL	400.000

PART A

(First-Year Transactions)

3. On January 3, each company purchased land and a building for \$420,000. Both managers assigned \$70,000 to the land and \$350,000 to the building. Each company paid cash for the land and building.

PART A

(First-Year Transactions)

BALANÇO	03-fev-11
	terra+edif
Caixa	(420.000)
Estoque	
Contas a receber	
Equipamentos	
Edifícios	350.000
Terrenos	70.000
ATIVO TOTAL	0
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	
PASSIVO TOTAL	0

PART A

(First-Year Transactions)

4. On January 5, each company purchased delivery equipment at a cost of \$80,000. Both purchases were made with cash.

PART A

(First-Year Transactions)

BALANÇO	05-fev-11
	equipto
Caixa	(80.000)
Estoque	
Contas a receber	
Equipamentos	80.000
Edifícios	
Terrenos	
ATIVO TOTAL	0
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	
PASSIVO TOTAL	0

PART A

(First-Year Transactions)

5. Each company **sells** one model of home heating unit, and made the following **credit purchases during the year**. (You may record all the **purchases in one transaction**.)

<u>Date</u>	<u>Number Of Units</u>	<u>Cost Per Unit</u>
January 10	40	\$1,000
March 14	60	1,100
June 1	20	1,150
September 15	62	1,200
October 30	28	1,300

PART A

(First-Year Transactions)

BALANÇO	compras
Caixa	
Estoque	239.800
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	239.800
Fornecedores	239.800
Empréstimo	
Capital	
Lucros acumulados	
PASSIVO TOTAL	239.800

PART A

(First-Year Transactions)

6. Each company **sold 160 units for \$398,500** during the year. All sales were on **credit**; 90 days, same as cash. You will just record the sales piece of this transaction for now. Management has not yet determined how inventory and cost of goods sold will be **valued**. Therefore, this year, management will use the **periodic inventory system** and record cost of goods sold at the end of the year **(in Part B)**.

PART A

(First-Year Transactions)

BALANÇO	vendas
Caixa	
Estoque	
Contas a receber	398.500
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	398.500
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	398.500
PASSIVO TOTAL	398.500

PART A

(First-Year Transactions)

7. \$299,100 was collected during the year on the sales described in Transaction 6 above.

PART A

(First-Year Transactions)

BALANÇO	recebimentos
Caixa	299.100
Estoque	
Contas a receber	(299.100)
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	0
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	
PASSIVO TOTAL	0

PART A

(First-Year Transactions)

8. \$213,360 was paid on the purchases made in Transaction 5 above.

PART A

(First-Year Transactions)

BALANÇO	pagamentos
Caixa	(213.360)
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	(213.360)
Fornecedores	(213.360)
Empréstimo	
Capital	
Lucros acumulados	
PASSIVO TOTAL	(213.360)

PART A

(First-Year Transactions)

9. On September 30, the **first \$20,000 principal payment plus nine months' interest** was made on the note payable described in Transaction 2.

2. On January 2, each company borrowed \$400,000 on a 20-year, 7 percent note payable. Interest plus \$20,000 principal is due September 30 each year, beginning 20X1.

Empréstimo	SI	Juros	Amort+Juros	Interm	Juros	SF
Ano 0	0	0	0			400.000
Ano 1	400.000	21.000	(41.000)	380.000	6.650	386.650
Ano 2	386.650	20.299	(46.949)	360.000	6.300	366.300
Ano 3	366.300	19.231	(45.531)	340.000	5.950	345.950
Ano 4	345.950	18.162	(44.112)	320.000	5.600	325.600
Ano 5	325.600	17.094	(42.694)	300.000	5.250	305.250
Ano 6	305.250	16.026	(41.276)	280.000	4.900	284.900
Ano 7	284.900	14.957	(39.857)	260.000	4.550	264.550
Ano 8	264.550	13.889	(38.439)	240.000	4.200	244.200
Ano 9	244.200	12.821	(37.021)	220.000	3.850	223.850
Ano 10	223.850	11.752	(35.602)	200.000	3.500	203.500
Ano 11	203.500	10.684	(34.184)	180.000	3.150	183.150
Ano 12	183.150	9.615	(32.765)	160.000	2.800	162.800
Ano 13	162.800	8.547	(31.347)	140.000	2.450	142.450
Ano 14	142.450	7.479	(29.929)	120.000	2.100	122.100
Ano 15	122.100	6.410	(28.510)	100.000	1.750	101.750
Ano 16	101.750	5.342	(27.092)	80.000	1.400	81.400
Ano 17	81.400	4.274	(25.674)	60.000	1.050	61.050
Ano 18	61.050	3.205	(24.255)	40.000	700	40.700
Ano 19	40.700	2.137	(22.837)	20.000	350	20.350
Ano 20	20.350	1.068	(21.418)	0	0	0

PART A

(First-Year Transactions)

BALANÇO	juros
Caixa	
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	0
Fornecedores	
Empréstimo	21.000
Capital	
Lucros acumulados	(21.000)
PASSIVO TOTAL	0

PART A

(First-Year Transactions)

BALANÇO	pgto emprest
Caixa	(41.000)
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	(41.000)
Fornecedores	
Empréstimo	(41.000)
Capital	
Lucros acumulados	
PASSIVO TOTAL	(41.000)

PART A

(First-Year Transactions)

10. A total of \$34,200 was paid for a variety of expenses, such as advertising, supplies, insurance, and wages. These expenses are recorded in an account called “other operating expenses.”

PART A

(First-Year Transactions)

BALANÇO	despesas
Caixa	(34.200)
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	(34.200)
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	(34.200)
PASSIVO TOTAL	(34.200)

PART A

(First-Year Transactions)

11. Dividends of \$7.25 per share were paid to the stockholders on December 1.

PART A

(First-Year Transactions)

BALANÇO	dividendos
Caixa	(23.200)
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	(23.200)
Fornecedores	
Empréstimo	
Capital	
Lucros acumulados	(23.200)
PASSIVO TOTAL	(23.200)



\$7,25 x 3200 ações

PART A

(First-Year Transactions)

12. Management made an adjusting entry to accrue three months' interest on the note payable in Transactions 2 and 9 above.

2. On January 2, each company borrowed \$400,000 on a 20-year, 7 percent note payable. Interest plus \$20,000 principal is due September 30 each year, beginning 20X1.

Empréstimo	SI	Juros	Amort+Juros	Interm	Juros	SF
Ano 0	0	0	0			400.000
Ano 1	400.000	21.000	(41.000)	380.000	6.650	386.650
Ano 2	386.650	20.299	(46.949)	360.000	6.300	366.300
Ano 3	366.300	19.231	(45.531)	340.000	5.950	345.950
Ano 4	345.950	18.162	(44.112)	320.000	5.600	325.600
Ano 5	325.600	17.094	(42.694)	300.000	5.250	305.250
Ano 6	305.250	16.026	(41.276)	280.000	4.900	284.900
Ano 7	284.900	14.957	(39.857)	260.000	4.550	264.550
Ano 8	264.550	13.889	(38.439)	240.000	4.200	244.200
Ano 9	244.200	12.821	(37.021)	220.000	3.850	223.850
Ano 10	223.850	11.752	(35.602)	200.000	3.500	203.500
Ano 11	203.500	10.684	(34.184)	180.000	3.150	183.150
Ano 12	183.150	9.615	(32.765)	160.000	2.800	162.800
Ano 13	162.800	8.547	(31.347)	140.000	2.450	142.450
Ano 14	142.450	7.479	(29.929)	120.000	2.100	122.100
Ano 15	122.100	6.410	(28.510)	100.000	1.750	101.750
Ano 16	101.750	5.342	(27.092)	80.000	1.400	81.400
Ano 17	81.400	4.274	(25.674)	60.000	1.050	61.050
Ano 18	61.050	3.205	(24.255)	40.000	700	40.700
Ano 19	40.700	2.137	(22.837)	20.000	350	20.350
Ano 20	20.350	1.068	(21.418)	0	0	0

PART A

(First-Year Transactions)

BALANÇO	juros
Caixa	
Estoque	
Contas a receber	
Equipamentos	
Edifícios	
Terrenos	
ATIVO TOTAL	0
Fornecedores	
Empréstimo	6.650
Capital	
Lucros acumulados	(6.650)
PASSIVO TOTAL	0

PART A

(First-Year Transactions)

PART A														
BALANÇO	02-fev-11	02-fev-11	03-fev-11	05-fev-11	compras	vendas	recebimento	pagamentos	juros	pgto	despesas	dividendos	juros	Final
	Capital	Empréstimo	terra+edif	equipto						emprest				
Caixa	160.000	400.000	(420.000)	(80.000)			299.100	(213.360)		(41.000)	(34.200)	(23.200)		47.340
Estoque					239.800									239.800
Contas a receber						398.500	(299.100)							99.400
Equipamentos				80.000										80.000
Edifícios			350.000											350.000
Terrenos			70.000											70.000
ATIVO TOTAL	160.000	400.000	0	0	239.800	398.500	0	(213.360)	0	(41.000)	(34.200)	(23.200)	0	886.540
Fornecedores					239.800			(213.360)						26.440
Empréstimo		400.000							21.000	(41.000)			6.650	386.650
Capital	160.000													160.000
Lucros acumulados						398.500			(21.000)		(34.200)	(23.200)	(6.650)	313.450
PASSIVO TOTAL	160.000	400.000	0	0	239.800	398.500	0	(213.360)	0	(41.000)	(34.200)	(23.200)	0	886.540